

- motherapy in patients with previously untreated- or high-grade NHL. *Proceedings of the American Society of Clinical Oncology* 1998; 17:3a.
- [0146] 36. Tsai, D, Moore H, Porter D, Vaughn D, Luger S, Loh R, Schuster S, Stadtmauer E. Progressive intermediate grade non-Hodgkin's lymphoma after high dose therapy and autologous peripheral stem cell transplantation (PSCT) has a high response rate to Rituximab. *Blood* 1998; 92:415a, #1713.
- [0147] 37. Byrd J, Waselenko J, Maneatis T, Murphy T, Weickrum R, Ward F, White C. Rituximab therapy in hematologic malignancy patients with circulating blood tumor cells: Association with increased infusion-related side effects and rapid tumor lysis. *Blood* 1998; 92 (10 Suppl 1): 106a.
- [0148] 38. Jensen M, Winkler U, Manzke O, Diehl V, Engert A. Rapid tumor lysis in a patient with B-cell chronic lymphocytic leukemia and lymphocytosis treated with an anti-CD20 monoclonal antibody (IDEC—C2B8, rituximab). *Annals of Hematology* 1998; 77:89-91.
- [0149] 39. Winkler U, Jensen M, Manzke O, Tesch H, Bohlen H, Diehl V, Engert A. Severe side effects in patients with B-cell chronic lymphocytic leukemia (CLL) and lymphocytosis treated with the monoclonal antibody Rituximab. *Blood* 1998; 92:285b, #4228.
- [0150] 40. Witzig T, White C, Wiseman G, Gordon L, Emmanouilides C, Raubitschek A, Janakiraman N, Gutheil J, Spies S, Silverman D, Parker E, Grillo-López A. Phase I/II trial of IDEC-Y2B8 radioimmunotherapy for treatment of relapsed or refractory CD20 positive B-cell non-Hodgkin's lymphoma. *Journal of Clinical Oncology* 1999; Submitted.
- [0151] 41. Wiseman G, White C, Witzig T, Gordon L, Emmanouilides C, Raubitschek A, Janakiraman N, Spies S, Silverman D, Gutheil J, Schilder R, Parker E, Rosenberg J, Grillo-López A. IDEC-Y2B8 radioimmunotherapy: Baseline bone marrow involvement and platelet count are better predictors of hematologic toxicity than dosimetry. *Blood* 1998; 92:417a.
- [0152] 42. Witzig T, White C, Wiseman G, Gordon L, Emmanouilides C, Raubitschek A, Janakiraman N, Spies S, Silverman D, Gutheil J, Schilder R, Ding E, Shen D, Grillo-López A. IDEC-Y2B8 Radioimmunotherapy: Responses in patients with splenomegaly. *Blood* 1998; 92:417(a).
- [0153] 43. Witherspoon R P, Lum L G, Storb R. Immunologic reconstitution after bone marrow grafting. *Semin Hematol* 21:2, 1984.
- [0154] 44. Anderson, K C et al. Hematological engraftment and immune reconstitution posttransplant with anti-B1 purged autologous bone marrow. *Blood* 69:597, 1987.
- [0155] 45. Lum L G. Kinetics of immune reconstitution after human marrow transplantation. *Blood* 69:369, 1987.
- [0156] 46. Azogui O., Gluckman E., Fradelizi, D, Inhibition of IL-2 production after human allogeneic bone marrow transplantation. *J. Immunol.* 131:1205, 1983
- [0157] 47. Welte, K. et al, Defective Interleukin-2 production in patients after bone marrow transplantation and in vitro restoration of defective T lymphocyte proliferation by highly purified Interleukin. *Blood* 64:380, 1984.
- [0158] 48. Cayeau, S. et al., T-cell ontogeny after bone marrow transplantation: failure to synthesize Interleukin-2 (IL-2) and lack of CD2- and CD3-mediated proliferation by both CDE4+ and CD8+ cells even in the presence of exogenous IL-2. *Blood* 74:2270, 1989.
- [0159] 49. Bosley, A. et al., Interleukin-2 as consolidative immunotherapy against minimal residual disease. *Nouv Rev Fr Hematol* 32:13, 1990.
- [0160] 50. Caligiuri, M. A. et al, Extended continuous infusion low-dose recombinant Interleukin-2 in advanced cancer. Prolonged immunomodulation without significant toxicity. *J Clin Oncol* 9:2110, 1991.
- [0161] 51. Caligiuri, M. A. et al, Selective immune modulation of NK cells following prolonged infusions of low dose recombinant IL-2. *J Clin Invest* 91:123, 1993.
- [0162] 52. Caligiuri, M. A., Low-dose recombinant Interleukin-2 therapy: rationale and potential clinical applications. *SEM in Oncol* 20:3, 1993.
- [0163] 53. Klarnet, J. P. et al, Antigen-driven T cell clones can proliferate in vivo, eradicate disseminated leukemia and provide specific immunologic memory. *J Immunol.* 138:4012, 1987.
- [0164] 54. Soiffer, R. J. et al, Clinical and immunologic effects of prolonged infusion of low-dose recombinant Interleukin-2 after autologous and T cell-depleted allogeneic bone marrow transplantation. *Blood* 79:517, 1992.
- [0165] 55. Soiffer, R. J. et al, Effect of low-dose Interleukin-2 on disease relapse after T-cell depleted allogeneic bone marrow transplantation. *Blood* 84:964, 1994.
- [0166] 56. Lauria, F. et al, Immunologic and clinical modifications following low-dose subcutaneous administration of rIL-2 in non-Hodgkin's lymphoma patients after autologous bone marrow transplantation. *BMT* 18:79, 1996.
- [0167] 57. Vey, N. et al, A pilot study of autologous bone marrow transplantation followed by recombinant Interleukin-2 in malignant lymphomas. *Leukemia & Lymphoma* 21:107, 1996.
- [0168] 58. Venugopal, P. et al, Upregulation of CD20 expression in CLL cells by cytokines. Submitted to ASH Meeting, December 1998.

What is claimed is:

1. A method of extending median time to progression for responders by at least 13 months in patients with relapsed or refractory, low grade or follicular, CD20-positive, B-cell non-Hodgkin's lymphoma, comprising administering four doses of 375 mg/m² of rituximab to the patients.
2. A method according to claim 1, wherein the patients exhibit an overall response rate to the administration of about 48%.
3. A method of treating relapsed or refractory, low-grade or follicular non-Hodgkin's lymphoma in a human patient comprising administering to the patient four weekly infusions of rituximab, each at a dose of 375 mg/m², wherein the initial infusion rate for the first dose is 50 mg/h, with a subsequent infusion rate increase if no toxicity is seen in the patient, and wherein the second, third, and fourth doses are administered at an infusion rate of more than 50 mg/h.
4. The method of claim 3, wherein the infusion is interrupted if an infusion-related toxicity reaction is seen in the patient.
5. The method of claim 4, wherein the infusion is resumed once the infusion-related toxicity reaction subsides.

* * * * *